

CLIPPEDIMAGE= JP401307271A  
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TITLE: SEMICONDUCTOR DEVICE AND MANUFACTURE THEREOF

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INVENTOR-INFORMATION:  
NAME  
KAWAMURA, SEIICHIRO

ASSIGNEE-INFORMATION:  
NAME  
FUJITSU LTD

	COUNTRY
	N/A

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ABSTRACT:  
PURPOSE: To lower offset resistance by dividing a current path into the plural and forming the offset regions of each current path by semiconductor regions substantially composed of a single crystal.

CONSTITUTION: Each offset region 13 is constituted of semiconductor regions 14 substantially consisting of a single crystal. The length of the offset region 13, a distance between a gate conductor 15 and a low-resistance drain region 12, is brought to 10-20 $\mu$ m, and channel width, width in the direction vertical to the flow of currents in each channel region under the gate conductor 15, is brought to 10-20 $\mu$ m. The size of the offset region 13 is limited by a maximum region capable of being changed into a single crystal. A plurality of such offset regions 13 in size capable of being changed into the single crystal are prepared, and connected in parallel,

thus manufacturing a device having desired overall channel width, then acquiring the quantity of currents required. Accordingly, the offset regions are turned into the single crystal, and an IC including an offset type FET having high breakdown strength and low ON resistance can be manufactured.

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